

R E P O R T R E S U M E S

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ENGINEERING AND TECHNICIAN ENROLLMENTS FALL 1967. SUMMARY
REPORT.

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ENGINEERING MANPOWER COMMISSION, NEW YORK, N.Y.

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INSTITUTES, ENGINEERING COUNCIL ON PROFESSIONAL DEVELOPMENT,

THIS REPORT SUMMARIZES IMPORTANT DATA OF THE ENROLLMENT
SURVEY CONDUCTED BY THE ENGINEERING MANPOWER COMMISSION OF
ENGINEERS JOINT COUNCIL IN THE FALL OF 1967. QUESTIONNAIRES
WERE SENT TO ALL KNOWN UNITED STATES TECHNICAL INSTITUTES,
JUNIOR COLLEGES, AND OTHER INSTITUTIONS OFFERING ENGINEERING
OR INDUSTRIAL ENGINEERING TECHNOLOGY. MORE THAN 97 PERCENT OF
THE QUESTIONNAIRES WERE RETURNED. TABLES INCLUDED INDICATE
INFORMATION FOR (1) UNDERGRADUATE STUDENTS IN ALL ENGINEERING
SCHOOLS, (2) ENROLLMENTS IN ALL CURRICULA, UNDERGRADUATE FULL
TIME, ARRANGED BY TYPE OF SCHOOL, (3) ENGINEERING AND
TECHNOLOGY SURVEY, ALL TECHNOLOGY SCHOOLS, ASSOCIATE DEGREE
OR CERTIFICATE PROGRAMS ARRANGED BY CURRICULUM, (4) ASSOCIATE
DEGREE OR CERTIFICATE PROGRAMS ARRANGED BY TYPE OF SCHOOL,
(5) BACHELOR OF TECHNOLOGY PROGRAMS ARRANGED BY TYPE OF
SCHOOL, (6) ALL PRE-ENGINEERING STUDENTS ARRANGED BY
CURRICULUM, AND (7) ALL PRE-ENGINEERING STUDENTS ARRANGED BY
TYPE OF SCHOOL. A SAMPLE OF THE FORMS USED IN THE SURVEY IS
INCLUDED. THIS DOCUMENT IS ALSO AVAILABLE FOR \$1.00 FROM THE
ENGINEERING MANPOWER COMMISSION, 345 EAST 47TH STREET, NEW
YORK, NEW YORK 10017. (DH)

ED019244

ENGINEERING and TECHNICIAN ENROLLMENTS

FALL 1967

SUMMARY REPORT

BY THE

ENGINEERING MANPOWER COMMISSION

OF

ENGINEERS JOINT COUNCIL



SE004 297

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Engineering and Technician Enrollments -- Fall 1967
SUMMARY REPORT

by the
ENGINEERING MANPOWER COMMISSION
of Engineers Joint Council

January 1968

\$1.00

The Engineering Manpower Commission of Engineers Joint Council is charged with the following responsibility:

"To engage in studies and analyses of the supply, demand, and utilization of engineering and technical manpower; to make recommendations, conduct programs, and develop reports concerning these aspects of engineering and technical manpower; and to carry on such other programs in the field of manpower as may be authorized by the Board of Directors of EJC."

The Commission is made up of men and women from industry, education, government, and the professional societies whose work involves a close association with technical manpower problems. Members of the following engineering societies are currently serving as Commissioners:

- American Society of Civil Engineers
- American Institute of Mining, Metallurgical, and Petroleum Engineers
- The American Society of Mechanical Engineers
- American Water Works Association
- Institute of Electrical and Electronics Engineers
- The American Society for Engineering Education
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers
- American Society of Agricultural Engineers
- American Institute of Chemical Engineers
- Society of Fire Protection Engineers
- Society for Nondestructive Testing
- The Society of American Military Engineers
- The American Institute of Industrial Engineers
- American Institute of Consulting Engineers
- American Institute of Plant Engineers
- American Association of Cost Engineers
- American Society for Metals
- Instrument Society of America
- American Society for Quality Control
- National Institute of Ceramic Engineers
- Society of Women Engineers

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Acknowledgments

The principal contributors to this report were, of course, the deans, registrars, and other officials of approximately 870 schools who provided enrollment data on their engineering and technology students. Thanks are hereby extended to all of them for their cooperation in this survey.

Thanks are also due to the American Society for Engineering Education for encouraging and assisting the Engineering Manpower Commission to undertake this survey. Dr. W. Leighton Collins, Executive Secretary, and Dr. George D. Lobingier, Past President and member of the Board of Directors of ASEE, personally contributed invaluable help and advice in making the survey a success.

Donald E. Irwin and Theodore J. Carron, as 1967 and 1968 Chairmen of the EMC Surveys Committee, had an important part in the planning and policy making that went into this project. Richard C. Fremon contributed technical advice in setting up a computer program for handling the data. Thanks are also due to Dr. Donald C. Metz for his pioneering work and advice in connection with the technician portion of the survey.

The survey was conducted under the general direction of John D. Alden, Executive Secretary of the Engineering Manpower Commission, with the assistance of Miss Carol Iceland of the EMC staff in a multitude of essential functions.

Programming and data processing were done by Computer House, Inc. of New York City.

J. D. A.

Introduction

This report contains the highlights of the enrollment survey conducted by the Engineering Manpower Commission of Engineers Joint Council in the fall of 1967.

Questionnaires were sent to all known engineering schools in the U.S. and replies were received from practically all of them. To make the data comparable with previous years, estimates were made for the few schools that did not respond. These constituted less than 3% of the total enrollments reported. Engineering enrollment data are thus entirely comparable with those reported by the U.S. Office of Education in previous years. In a few cases schools were unable to break down their data exactly as desired for this report such as being unable to separate master's and doctor's enrollments in the first year, etc. In such instances an arbitrary division was made on the basis of overall ratios prevailing in previous years. The numbers involved were too small to be significant in the totals.

For the technician survey, questionnaires were sent to all known technical institutes, junior colleges, and other institutions offering programs in engineering technology or industrial technology. Since there is no comprehensive list of all such schools, and new ones are constantly being established, the enrollment figures reported here are only an approximation of the total technician enrollments for the entire U.S. Our figures represent, however, the largest known group of technician schools ever surveyed. In the case of schools having curricula accredited by Engineers' Council for Professional Development, which constitute the solid core of engineering technology education, 100% returns are reported. No attempt was made to estimate enrollment for non-responding schools not on the ECPD list.

Explanations

Explanations of specific features of each data table will be found on the page facing the table. The following additional explanations are general in nature.

Tables showing data by curriculum follow, in general, the designations and groupings used by Engineers' Council for Professional Development in its 1966 list of Curricula Leading to First Degrees in Engineering, with the following exceptions:

- "Biomedical" is an unofficial category added by EMC. No accredited curricula exist with this title.
- "Marine" as used in this survey includes curricula in ocean engineering, marine engineering, and related titles, in addition to the naval architecture and marine engineering curricula accredited by ECPD.
- "Other" includes the welding engineering curriculum accredited by ECPD, as well as a variety of unaccredited curricula not classifiable under any other group.
- "Undifferentiated" refers to students who have not designated a major engineering field or who are in "common core" courses at the lower undergraduate levels.

For the technology schools, a simplified grouping was used consisting of aerospace, civil, drafting and design, electrical and electronic, mechanical, and all other fields of engineering technology; also physical science and mathematics technology, and industrial technology. There are no exact definitions for any of these fields, and in most cases classification was made by the reporting institution itself.

DATA TABLES

ENGINEERING AND TECHNICIAN ENROLLMENTS
FALL 1967

Table I

See page 5 for general notes on interpretation of the survey data .

The totals for women and foreign students are estimated because many schools reported that they were unable to provide this information . For the schools that did report data , the ratio of women and foreign students to total enrollments was calculated year by year . This ratio was applied to the total enrollment for all schools to arrive at the figures shown .

ENGINEERING MANPOWER COMMISSION

ENGINEERING ENROLLMENT SURVEY - FALL 1967

ALL ENGINEERING SCHOOLS, ENTIRE U. S.

CURRICULUM	NO OF INST REPTG	U N D E R G R A D U A T E S - F U L L T I M E										M A S T E R S O R O T H E R P R E - D O C D E G R E E F U L L T I M E		D O C T O R D E G R E E F U L L T I M E		TOTAL GRADUATE STUDENTS
		FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	FIFTH YEAR	T O T A L		FIRST YEAR	OTHER YEARS	FIRST YEAR	OTHER YEARS	DOCTOR DEGREE ALL YEARS			
							3RD-5TH YEARS	1ST-5TH YEARS								
AEROSPACE	69	3331	3521	3003	2474	96	5573	12425		822	670			1050	2542	
AGRICULTURAL	43	516	464	485	457	36	978	1958		215	130			151	496	
ARCHITECTURAL	18	762	691	593	667	181	1441	2894		93	25			1	119	
BIOMEDICAL	16	0	0	8	9	0	17	17		42	46			102	190	
CHEMICAL	140	3410	4220	4205	3959	372	8536	16166		1469	970			1612	4051	
CIVIL	185	5778	6441	7187	7475	693	15355	27574		2938	1708			1679	6325	
ELECTRICAL	209	11818	12848	13388	13081	1374	27843	52509		5834	4191			3891	13916	
ENGINEERING SCIENCES	101	2115	1969	2077	1977	31	4085	8169		824	580			1066	2470	
ENVIRONMENT AND HEALTH (1)	25	25	45	38	37	0	75	145		174	61			172	407	
GENERAL AND UNIFIED ENGRG	55	3178	2170	2129	1678	36	3843	9191		523	171			364	1058	
GEOLOGICAL	23	207	190	211	175	0	386	783		139	50			63	252	
INDUSTRIAL	102	948	1645	2689	2832	395	5916	8509		1679	1032			732	3443	
MARINE	14	514	585	517	514	0	1031	2130		88	161			62	311	
MECHANICAL	198	8224	9316	10196	9668	1251	21115	38655		3000	2341			1934	7275	
METALLURGICAL AND MATERIALS	74	575	860	960	1011	85	2056	3491		664	420			1008	2092	
MINING	23	131	148	174	198	0	372	651		91	82			52	225	
NUCLEAR	41	209	215	237	202	0	439	863		418	321			619	1358	
PETROLEUM	21	292	317	341	273	0	614	1223		65	103			70	238	
TEXTILE	7	74	125	114	125	0	239	438		32	11			3	46	
OTHER ENGINEERING	61	586	680	715	680	19	1414	2680		743	908			461	2112	
UNDIFFERENTIATED	137	34858	10525	1216	59	20	1295	46678		41	356			284	681	
*TOTAL - ALL CURRICULA	274	77551	56975	50483	47551	4589	102623	237149		19894	14337			15376	49607	
WOMEN - ALL CURRICULA		898	571	402	247	18	667	2136		159	92			118	369	
FOREIGN - ALL CURRICULA		2195	2016	2018	1954	103	4075	8286		3528	2901			3199	9628	

(1) A few schools included Sanitary Engineering under Civil Engineering.

Table II

See page 5 for general notes on interpretation of the survey data .

This table contains several breakdowns of the "all school" data on the top line .

The second and third lines separate those schools on the 1966 list of Curricula Leading to First Degrees in Engineering Accredited by the Engineers' Council for Professional Development from all other schools . These two lines add up to the totals on the top line .

The next two lines distinguish between enrollments in curricula specifically accredited on the ECPD list , and all other curricula . In a few combined fields (such as metallurgical and materials , for example) where a school may have had both accredited and non-accredited curricula in the field , all enrollments in the entire field were arbitrarily treated as accredited . The resulting overstatement of enrollments in accredited curricula is negligible for all practical purposes .

Lines 6 and 7 separate the publicly and privately controlled schools . In lines 8 , 9 , and 10 the public group is further broken down into state , municipal , and federal subgroupings , while in the last two lines the private sector is divided into non-sectarian and religious subgroups .

ENGINEERING MANPOWER COMMISSION

ENGINEERING ENROLLMENT SURVEY - FALL 1967

ENROLLMENTS IN ALL CURRICULA, ENTIRE U. S.

TYPE OF SCHOOL	NO OF INST REPTG	U N D E R G R A D U A T E S - F U L L T I M E										MASTERS OR OTHER PRE-DOC DEGREE FULL TIME		DOCTOR DEGREE FULL TIME		TOTAL GRADUATE STUDENTS
		FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR	FIFTH YEAR	TOTAL		FIRST YEAR	OTHER YEARS	FULL TIME	ALL YEARS				
							3RD-5TH YEARS	1ST-5TH YEARS								
ALL ENGINEERING SCHOOLS	274	77551	56975	50483	47551	4589	102623	237149	19894	14337	15376	49607				
SCHOOLS ON ECPD LIST	180	64583	48640	43443	41001	3927	88371	201594	19189	13782	15090	48061				
SCHOOLS NOT ON ECPD LIST	94	12968	8335	7040	6550	662	14252	35555	705	555	286	1546				
ECPD ACCREDITED CURRICULA	NA	60846	44925	39742	37455	3704	80901	186672	16885	11718	12902	41505				
NON-ECPD ACCREDITED CURRICULA	NA	16705	12050	10741	10096	885	21722	50477	3099	2619	2474	8102				
PUBLIC SCHOOLS	150	56148	41310	36694	34797	2011	73502	170960	13886	6974	8755	29615				
PRIVATE SCHOOLS	124	21403	15665	13789	12754	2578	29121	66189	6008	7363	6621	19992				
STATE SCHOOLS	137	51512	38153	33726	32047	1580	67353	157018	12850	6060	8506	27416				
MUNICIPAL SCHOOLS	6	2447	1445	1333	1288	431	3052	6939	567	652	196	1415				
FEDERAL SCHOOLS	7	2194	1712	1635	1462	0	3097	7003	469	262	53	784				
PRIVATE NON-SECTARIAN	82	16979	12238	10921	9952	1798	22671	51888	5177	6231	6325	17733				
PRIVATE RELIGIOUS	42	4424	3427	2868	2802	780	6450	14301	831	1132	296	2259				

Table III

See page 5 for general notes on interpretation of the survey data .

This table covers enrollments in two-year terminal programs reported by 512 institutions . Specific curricula in some schools do not clearly fall into any single one of the broad groupings given . In general , it was left to each school to decide how it wanted to report its own enrollments .

ENGINEERING MANPOWER COMMISSION

ENGINEERING AND TECHNOLOGY ENROLLMENT SURVEY - FALL 1967

ALL TECHNOLOGY SCHOOLS, ENTIRE U. S.

ASSOCIATE DEGREE OR CERTIFICATE PROGRAMS

CURRICULUM	NO OF INST REPTG	FULL TIME STUDENTS			TOTAL FULL TIME	ALL PART TIME
		FIRST YEAR	SECOND YEAR	OTHER YEARS		
AEROSPACE	29	2435	1135	58	3628	580
CIVIL AND RELATED	196	6213	3575	172	9960	4177
DRAFTING AND DESIGN	306	10368	5379	269	16016	4802
ELECTRICAL AND ELECTRONIC	405	20508	11855	1381	33744	36147
MECHANICAL AND RELATED	249	10699	6088	389	17176	7565
OTHER TECHNOLOGY	168	5117	2468	89	7674	7522
* TOTAL ENG TECH	498	55340	30500	2358	88198	60793
PHYS SCIENCE AND MATH TECH	61	3189	1283	7	4479	1395
INDUSTRIAL TECH	121	6232	3129	12	9373	5307
* ALL TECHNOLOGY COMBINED	512	64761	34912	2377	102050	67495

Table IV

See page 5 for general notes on interpretation of the survey data.

See notes for Table II for explanation of the breakdowns. In the case of the publicly controlled schools it is difficult to make a clear-cut distinction between state and local control; therefore no subgrouping has been attempted.

ENGINEERING MANPOWER COMMISSION

ENGINEERING AND TECHNOLOGY ENROLLMENT SURVEY - FALL 1967
ENROLLMENTS IN ALL CURRICULA, ENTIRE U. S.

ASSOCIATE DEGREE OR CERTIFICATE PROGRAMS

TYPE OF SCHOOL	NO OF INST REPTG	FULL TIME STUDENTS			TOTAL FULL TIME	ALL PART TIME
		FIRST YEAR	SECOND YEAR	OTHER YEARS		
ALL TECHNOLOGY SCHOOLS	512	64761	34912	2377	102050	67495
SCHOOLS ON ECPD LISTS	49	13668	8559	879	23106	5489
SCHOOLS NOT ON ECPD LISTS	463	51093	26353	1498	78944	62006
ECPD ACCREDITED CURRICULA	NA	11307	7211	876	19394	4236
NON-ECPD ACCREDITED CURR	NA	53454	27701	1501	82656	63259
ALL PUBLIC SCHOOLS	458	55475	28949	1358	85782	55371
ALL PRIVATE SCHOOLS	54	9286	5963	1019	16268	12124
PRIVATE NON-SECTARIAN	47	9057	5820	922	15799	11722
PRIVATE RELIGIOUS	7	229	143	97	469	402

Table V

See page 5 for general notes on interpretation of the survey data .

See notes for Table III regarding curriculum groups .

This table covers all enrollments in bachelor of technology programs . The 59 schools reporting such programs include some which also offer two-year technician programs , some with four-year engineering curricula , some with both , and some with no other technological programs than those reported in this table .

ENGINEERING MANPOWER COMMISSION

ENGINEERING AND TECHNOLOGY ENROLLMENT SURVEY - FALL 1967

ALL TECHNOLOGY SCHOOLS, ENTIRE U. S. (1)

BACHELOR OF TECHNOLOGY PROGRAMS

CURRICULUM	NO OF INST REPTG	FULL TIME STUDENTS				TOTAL FULL TIME	ALL PART TIME	ALL POST BACH
		FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR			
AEROSPACE	4	296	166	153	103	718	57	0
CIVIL AND RELATED	15	318	178	133	79	708	249	56
DRAFTING AND DESIGN	12	304	202	172	150	828	183	10
ELECTRICAL AND ELECTRONIC	23	553	430	385	294	1662	653	68
MECHANICAL AND RELATED	19	267	317	375	310	1269	409	63
OTHER TECHNOLOGY	22	443	383	548	417	1791	368	139
* TOTAL ENG TECH	45	2181	1676	1766	1353	6976	1919	336
PHYS SCIENCE AND MATH TECH	2	2	0	0	0	2	2	0
INDUSTRIAL TECH	22	957	796	905	809	3467	3026	50
* ALL TECHNOLOGY COMBINED	59	3140	2472	2671	2162	10445	4947	386

(1) Includes bachelor of technology curricula in both engineering and technology schools.

Table VI

See page 5 for general notes on interpretation of the survey data .

See notes for Table II for explanation of the breakdowns , and Table V for the types of schools covered .

At the time the survey was taken no bachelor of engineering technology curricula had been accredited by ECPD; therefore no statistics are given for lines 4 and 5.

ENGINEERING MANPOWER COMMISSION

ENGINEERING AND TECHNOLOGY ENROLLMENT SURVEY - FALL 1967
ENROLLMENTS IN ALL CURRICULA, ENTIRE U. S.

BACHELOR OF TECHNOLOGY PROGRAMS

TYPE OF SCHOOL	NO OF INST REPTG	FULL TIME STUDENTS				TOTAL FULL TIME	ALL PART TIME	ALL POST BACH
		FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR			
ALL TECHNOLOGY SCHOOLS	59	3140	2472	2671	2162	10445	4947	386
SCHOOLS ON ECPD LISTS	6	209	131	110	113	563	147	0
SCHOOLS NOT ON ECPD LISTS	53	2931	2341	2561	2049	9882	4800	386
ECPD ACCREDITED CURRICULA	NA							
NON-ECPD ACCREDITED CURR	NA							
ALL PUBLIC SCHOOLS	44	2109	1686	2040	1664	7499	1081	264
ALL PRIVATE SCHOOLS	15	1031	786	631	498	2946	3866	122
PRIVATE NON-SECTARIAN	13	924	702	534	409	2569	3783	122
PRIVATE RELIGIOUS	2	107	84	97	89	377	83	0

Table VII

See page 5 for general notes on interpretation of the survey data .

See notes for Table III regarding curriculum groups .

In the case of pre-engineering students, the "other" category consists almost entirely of enrollments in general or non-specialized curricula .

ENGINEERING MANPOWER COMMISSION

ENGINEERING AND TECHNOLOGY ENROLLMENT SURVEY - FALL 1967

ALL TECHNOLOGY SCHOOLS, ENTIRE U. S.

ALL PRE-ENGINEERING STUDENTS

CURRICULUM	NO OF INST REPTG	FULL TIME STUDENTS			TOTAL FULL TIME	ALL PART TIME
		FIRST YEAR	SECOND YEAR	OTHER YEARS		
AEROSPACE	28	206	85	0	291	12
CIVIL AND RELATED	86	1447	663	88	2198	383
DRAFTING AND DESIGN	34	582	219	16	817	115
ELECTRICAL AND ELECTRONIC	82	1229	608	14	1851	509
MECHANICAL AND RELATED	79	1155	578	6	1739	362
GENERAL AND OTHER	222	10942	5159	367	16468	4847
* TOTAL PRE-ENG	285	15561	7312	491	23364	6228

Table VIII

See page 5 for general notes on interpretation of the survey data .

See notes for Tables II , IV , and VI for explanation of the breakdowns .

ENGINEERING MANPOWER COMMISSION

ENGINEERING AND TECHNOLOGY ENROLLMENT SURVEY - FALL 1967
ENROLLMENTS IN ALL CURRICULA, ENTIRE U. S.

TYPE OF SCHOOL	NO OF INST REPTG	ALL PRE-ENGINEERING STUDENTS				TOTAL FULL TIME	ALL PART TIME
		FULL TIME STUDENTS					
		FIRST YEAR	SECOND YEAR	OTHER YEARS			
ALL TECHNOLOGY SCHOOLS	285	15561	7312	491	23364	6228	
SCHOOLS ON ECPD LISTS	10	689	354	0	1043	202	
SCHOOLS NOT ON ECPD LISTS	275	14872	6958	491	22321	6026	
ALL PUBLIC SCHOOLS	260	14838	6965	470	22273	5940	
ALL PRIVATE SCHOOLS	25	723	347	21	1091	288	
PRIVATE NON-SECTARIAN	15	522	237	6	765	238	
PRIVATE RELIGIOUS	10	201	110	15	326	0	

ENGINEERING ENROLLMENT SURVEY

(Note 1)

Field of Engineering Curriculum (Note 2)	1 Check If E C P D ACCREDITED (Note 3)	UNDERGRADUATES					Master's or Other Pre-Doctoral Degree (Note 6)		Doctor's Degree (Note 9)
		2 First Year (Note 4)	3 Second Year (Note 4)	4 Third Year	5 Fourth Year	6 Fifth Year (Note 5)	7 First Year (Note 5)	8 Other Years	
A Aerospace (aeronautical, astronautical, etc.)									
B Agricultural									
C Architectural									
D Biomedical									
E Chemical									
F Civil (incl. construction, transportation)									
G Electrical (incl. communications, electronics)									
H Engineering Sciences (incl. engineering mechanics, engineering physics)									
I Environment and Health (incl. sanitary)									
J General Engineering (incl. unified "Engineering" curricula but not undifferentiated students. See Note 4.)									
K Geological (incl. geophysical)									
L Industrial (incl. management)									
M Marine (incl. naval architecture and ocean engineering)									
N Mechanical									
O Metallurgical and Materials (incl. ceramic)									
P Mining (incl. mineral)									
Q Nuclear									
R Petroleum									
S Textile									
T Other specific engineering									
U Undifferentiated (Note 4)									
V Bachelor of Engineering Technology (Note 7)									
The following two categories should also be included in the individual curriculum totals above:									
W Women - All Curricula (Note 8)									
X Foreign Students - All Curricula (Note 8)									

Name of Institution _____
Address _____
Reporting Officer _____

ENGINEERING MANPOWER COMMISSION
345 East 47th Street
New York, New York 10017

Engineering Enrollment Survey - September 1967
INSTRUCTION SHEET

This survey is being made by the Engineering Manpower Commission of Engineers Joint Council with the support of the American Society for Engineering Education. The objective is to publish timely statistics on engineering enrollments for use in manpower planning by employers, educators, and others. This survey does not replace that conducted by the U. S. Office of Education, but is intended to produce key statistics sooner than available from the more detailed survey. A complimentary copy of the report will be sent to the reporting officer of all participating institutions as soon as published.

PLEASE NOTE THE FOLLOWING BEFORE FILLING OUT THE QUESTIONNAIRE:

- Note 1 - Report full time enrollments only, including co-op programs. Include only students enrolled definitely as candidates for an engineering degree.
- Note 2 - Curriculum. The groupings are based on the 1966 ECPD listing. Use "Other Specific Engineering" category (line T) only if curriculum cannot be included in any related major group.
- Note 3 - Accreditation. For each curriculum field reported, check this column if one or more curriculum in the field is accredited by ECPD at your institution.
- Note 4 - Undifferentiated Students. If your institution does not differentiate curricula during the first or second years, report these students only in line U, "Undifferentiated." Do not use this group for students enrolled in "General Engineering" (line J) or "Other Specific Engineering" (line T) curricula.
- Note 5 - Fifth Year Students. Report candidates for five year bachelor's degree in column 6, whether regular or co-op program. If the curriculum is an integrated one leading to a five-year master's degree, report fifth year students under first year of master's degree in column 7.
- Note 6 - Other Pre-Doctoral Degree. Enrollments for professional degrees beyond the bachelor's but pre-doctoral in level are to be included with master's degree enrollments for this report.
- Note 7 - Bachelor's of Engineering Technology. Report only students definitely enrolled in curricula leading to a bachelor's degree or higher. Do not report students in two-year technician curricula.
- Note 8 - Women and Foreign Students. Because of the small numbers involved, totals should be reported for all curricula combined. These should also be included in the individual curriculum totals above.

IMPORTANT: See Notes on Reverse Side Before Filling Out This Form

ENGINEERING TECHNOLOGY ENROLLMENT SURVEY

(Note 1)

Field of Curriculum	1 Check if E C P D Accredited (Note 2)	ASSOCIATE DEGREE OR CERTIFICATE PROGRAMS (Notes 3, 4, 5)					BACHELOR OF TECHNOLOGY PROGRAMS (Note 6)						PRE-ENGINEERING STUDENTS (Note 7)				
		Full Time Students			5 All Part Time Students	Full Time Students				10 All Part Time Students	11 Post Baccalaureate All Students	Full Time Students			15 All Part Time Students		
		2 First Year	3 Second Year	4 Other Years		6 First Year	7 Second Year	8 Third Year	9 Fourth Year			12 First Year	13 Second Year	14 Other Years			
I. ENGINEERING TECHNOLOGY (Note 3)																	
A Aerospace																	
B Civil and Related (Note 9)																	
C Drafting and Design																	
D Electrical and Electronics (Note 10)																	
E Mechanical and Related (Note 11)																	
F Other (Note 12)																	

II. PHYSICAL SCIENCE AND INDUSTRIAL
TECHNOLOGY

G Physical Science and Mathematics Technology (Note 4)																	
H Industrial Technology (Note 5)																	

Name of Institution _____

Address _____

Reporting Officer _____

A complimentary copy of the report will be sent to the reporting officer as soon as it is published.

ENGINEERING MANPOWER COMMISSION
345 East 47th Street
New York, New York 10017

Engineering Technology Enrollment Survey - September 1967

INSTRUCTION SHEET

This survey is being made by the Engineering Manpower Commission of Engineers Joint Council with the support of the American Society for Engineering Education. The objective is to publish timely statistics on engineering technology enrollments for use in manpower planning by employers, educators, and others. This survey does not replace that conducted by the U. S. Office of Education, but is intended to produce key statistics sooner than available from the more detailed survey. A complimentary copy of the report will be sent to the reporting officer of all participating institutions as soon as it is published.

PLEASE NOTE THE FOLLOWING BEFORE FILLING OUT THE QUESTIONNAIRE:

- Note 1 - Report students enrolled in technician or technology programs as indicated. Do not report students in curricula leading to an engineering degree at your institution. (A separate questionnaire has been sent to all engineering schools.) See Note 7 for pre-engineering transfer students.
- Note 2 - For each field reported, check this column if one or more curriculum in the field is accredited by ECPD at your institution.
- Note 3 - Engineering Technicians - students in engineering oriented organized occupational curricula of at least two (2) but less than four (4) year, leading to Associate degree or similar designation.
- Note 4 - Physical Science Technicians - students in physical science and mathematics oriented organized occupational curricula of at least two (2) but less than four (4) years, leading to Associate degree or similar designation. (Do not include Medical or Dental Technicians or others not directly related to the physical sciences.)
- Note 5 - Industrial Technicians - students in skill oriented organized occupational curricula of at least two (2) years leading to Associate degree or similar designation.
- Note 6 - Bachelor of Technology - students in engineering or technically oriented curricula leading to a Bachelor's degree in technology but not to a recognized degree in engineering. Separate categories are provided for engineering technology and industrial technology curricula.
- Note 7 - Report only students in non-terminal pre-engineering programs of at least two (2) years duration, leading to transfer to an engineering school for completion of a Bachelor's degree in engineering. To be reported only where the institution itself does not award Bachelor's degree in engineering. Report students in the closest applicable field of engineering technology. If students are not differentiated as to specialized field, report them in line F, "Other."
- Note 8 - This column has been provided to report students in master's degree and other post-baccalaureate programs at a few schools.
- Note 9 - Civil Engineering Technology - include also architectural, building, construction, highway, structural, surveying, and similar engineering technology programs.
- Note 10 - Electrical and Electronics Engineering Technology - include also communications and similar engineering technology programs.
- Note 11 - Mechanical Engineering Technology - include also air conditioning, diesel, machinery, and similar engineering technology programs.
- Note 12 - Other Engineering Technology - include general, industrial, and other engineering technology programs which cannot be reported elsewhere.

ENGINEERS JOINT COUNCIL MEMBERSHIP

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AMERICAN INSTITUTE OF MINING, METALLURGICAL AND PETROLEUM ENGINEERS
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AMERICAN WATER WORKS ASSOCIATION
AMERICAN SOCIETY FOR ENGINEERING EDUCATION
SOCIETY OF NAVAL ARCHITECTS AND MARINE ENGINEERS
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AMERICAN INSTITUTE OF PLANT ENGINEERS
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WESTERN SOCIETY OF ENGINEERS
MICHIGAN ENGINEERING SOCIETY
ENGINEERING SOCIETY OF CINCINNATI
LOUISIANA ENGINEERING SOCIETY
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WASHINGTON SOCIETY OF ENGINEERS
ENGINEERING SOCIETIES OF NEW ENGLAND
SOUTH CAROLINA SOCIETY OF ENGINEERS
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HARTFORD ENGINEERS CLUB
INTERNATIONAL MATERIAL MANAGEMENT SOCIETY (New Jersey Chapter)
CHINESE INSTITUTE OF ENGINEERS (New York)

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SOCIETY OF AMERICAN MILITARY ENGINEERS
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NATIONAL INSTITUTE OF CERAMIC ENGINEERS
AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING
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SOCIETY OF WOMEN ENGINEERS
SOCIETY FOR THE HISTORY OF TECHNOLOGY
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